

WHAT IS CLAIMED IS:

1. A network comprising:
a status encoder comprising:
5 a first pair of wires;
an encoding circuit connected to the first pair of wires, the
encoding circuit receiving battery status information, and outputting a
plurality of tones that represent battery status to the first pair of wires;
and
10 a high-pass filter connected to the encoding circuit via the
first pair of wires.
2. The network of claim 1 wherein the high pass filter
includes a pair of capacitors connected to the first pair of wires, and
15 electrically connectable to a second pair of wires.
3. The network of claim 2 wherein the second pair of wires
carries a DC voltage, the pair of capacitors superimposing the plurality
of tones onto the DC voltage.
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4. The network of claim 3 wherein only one tone is output at
a time.
5. The network of claim 3 wherein a plurality of tones are
25 output at a same time.
6. The network of claim 1 and further comprising:
a battery that has a battery voltage; and

a control circuit that passes the battery voltage to an output node electrically connected to a second pair of wires, the second pair of wires being electrically coupled to the first pair of wires via the high-pass filter.

- 5 7. The network of claim 6 and further comprising:
 a low-pass filter connected to the output node;
 a voltage sensor connected to the low-pass filter to sense a DC
 voltage on the output node; and
 a controller connected to the encoding circuit, the control circuit,
10 and the voltage sensor, the controller determining a status of the
 battery, and outputting battery status information to the status encoder.

8. The network of claim 7 and further comprising a power
 supply electrically connected to the second pair of wires, the power
15 supply placing a DC voltage on the second pair of wires.

9. The network of claim 8 wherein the power supply
 comprises:
 a third pair of wires;
20 a power supply circuit connected to the third pair of wires, the
 power supply circuit receiving an AC voltage, converting the AC voltage
 into a DC voltage, and outputting the DC voltage from the power supply
 circuit to the third pair of wires; and
 a low-pass stage connected to the third pair of wires, and
25 electrically connectable to the second pair of wires to pass the DC
 voltage onto the second pair of wires, the low-pass stage including a
 pair of inductors connected to the third pair of wires, and electrically
 connectable to the second pair of wires, the pair of inductors blocking
 tones from reaching the power supply circuit.

10. The network of claim 9 and further comprising a twisted-pair cable that has a plurality of pairs of wires that include the second pair of wires.

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11. The network of claim 10 and further comprising a network terminal that includes:

an input node electrically connected to the second pair of wires;

a voltage sensor electrically connected to the input node;

10 a controller connected to the voltage sensor; and

a status decoder electrically connected to the input node, the status decoder receiving the plurality of tones, and outputting battery status information that represents the tones to the controller.

15 12. The network of claim 1 and further comprising an uninterruptible power supply that has a battery and a status port that outputs the battery status information to the encoding circuit.

13. The network of claim 12 and further comprising:

20 a second pair of wires;

a third pair of wires;

a power supply circuit connected to the third pair of wires, the power supply circuit receiving an AC voltage, converting the AC voltage into a DC voltage, and outputting the DC voltage from the power supply circuit to the third pair of wires; and

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a low-pass filter connected to the third pair of wires, and connectable to the second pair of wires, the second pair of wires being electrically coupled to the first pair of wires.

14. The network of claim 13 and further comprising a twisted-pair cable that has a plurality of pairs of wires that include the second pair of wires.

5 15. The network of claim 14 and further comprising a network terminal connected to the second pair of wires.

16. The network of claim 15 wherein the network terminal includes:

10 an input node connectable to the second pair of wires;
 a voltage sensor electrically connected to the input node;
 a controller connected to the voltage sensor; and
 a status decoder electrically connected to the input node, the
status decoder receiving the plurality of tones, and outputting battery
15 status information that represents the tones to the controller.

17. A network comprising:

a network terminal comprising:

 an input node connectable to a pair of wires,
20 a voltage sensor electrically connected to an input node;
and
 a controller connected to the voltage sensor.

18. The network of claim 17 wherein the network terminal
25 further comprises a status decoder electrically connected to the input node, the status decoder receiving a plurality of tones from the input node, and outputting battery status information that represents the tones to the controller.

19. A method of providing battery status information, the method comprising the steps of:
- placing a voltage on a pair of wires; and
 - superimposing a plurality of tones on the voltage on the pair of
- 5 wires, the plurality of tones representing a status of a battery, the battery switchably providing a voltage to the pair of wires.
20. The method of claim 19 and further comprising the step of detecting the plurality of tones, and determining a battery status from
- 10 the plurality of tones.